

C l a i m s

1.

A medical patient simulator, in particular a simulator for simulation of an infant,
comprising a torso (2) containing at least one artificial lung (6), a chest skin (3) placed
at least partially on the outside of the torso (2), characterized in that it also
comprises means (8, 9) of pulling down the chest skin (3) of the torso in an area
corresponding to an area where such retractions occur on a human being.

10 2.

A simulator according to Claim 1, characterized in that the chest skin (3) has
an elastic strap (8) attached to or integrated into the inside of the skin (3) approximately
in the middle of the area where retractions occur.

15 3.

A simulator according to Claim 2, characterized in that a pneumatic
mechanism (9, 11) is designed to pull the strap (8) in synchronous fashion with the
lung(s)' (6) raising and lowering of the chest to produce the desired cavity in the chest
skin (3).

20

4.

A medical patient simulator, in particular a simulator for simulation of an infant,
comprising a torso (2) containing at least one lung (6), with the option of altering the
compliance of the lung(s), characterized in that the lung or lungs (6) is/are
25 arranged between two plates (5, 7) in the torso (2), and that the spacing of the plates (5,
7) or their resistance against moving apart can be altered.

5.

A simulator according to Claim 4, characterized in that the lower plate (7) is
30 fixed, while the upper plate (5) is movable.

6.

A simulator according to Claim 5, characterized in that a pneumatically driven mechanism (14, 15, 16) pulls the upper plate (5) down towards the lower plate (7).

5

7.

A medical patient simulator, in particular a simulator for simulation of an infant,

comprising a torso (2), for simulation of muscle activity in a patient,

characterized in that the torso (2) comprises at least two actuators (23, 24)

10 arranged on the right and left sides, respectively, of the backside of the torso (2), which actuators (23, 24) are designed to be operated in the following modes:

- for simulation of normal muscle movement, alternate and regular activation of the actuators on the left and right sides,
- for simulation of muscle spasms; rapid and irregular activation of the actuators on the left and right sides,
- for simulation of defibrillation; rapid activation of both actuators simultaneously, once for each defibrillation

8.

20 A simulator according to Claim 7, characterized in that the actuators (23, 24) are air cushions.

9.

A system for controlling different pneumatic functions in a patient simulator,

25 characterized in that a pressure which is representative for each individual actuator (27) is measured and the filling is stopped when a pre-determined pressure is reached, a pressure sensor (32) for measuring the representative pressure being disposed at a distance from the actuator (27) and a throttle (35) being disposed upstream of the pressure sensor (32) for neutralizing the pressure difference between the pressure sensor (32) and the actuator (27).

10.

A medical patient simulator, in particular a simulator for simulation of an infant, comprising a head, characterized in one or more air cushions in at least one fontanelle area on the head of the simulator, which air cushion(s) is/are designed to be
5 filled with air in order to simulate an increased pressure in the brain.